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# Overview of progress towards sustainable development: a review of the implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation

## Report of the Secretary-General**

*Summary*

The present report contains a review of progress towards realizing the commitments and meeting the targets agreed to in Agenda 21 and subsequent intergovernmental meetings related to sustainable development, notably those contained in the Johannesburg Plan of Implementation. In the short time since the World Summit on Sustainable Development met, progress has been made mostly in terms of process, including capacity-building in developing countries (e.g., with respect to the Clean Development Mechanism of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, sustainable forest management, chemicals classification and labelling, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and trade promotion), development of action plans (e.g., for protecting the marine environment from land-based activities, adaptation to climate change, combating desertification), and refinement of the framework for global environmental governance. Key conventions like those on prior informed consent for trade in certain hazardous chemicals and pesticides and on persistent organic pollutants are close to entry into force. On the other hand, only halting progress has been made at the international level towards addressing challenges such as that of climate change, though regional, national and local initiatives are numerous.

* E/CN.17/2004/1.

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In terms of social and economic progress, the 1990s and the early part of the current decade have yielded very mixed outcomes. On the one hand, the world's two largest countries by population have made significant strides in poverty reduction and in improving various social indicators. On the other, many other developing countries have stagnated or even experienced periods of economic crisis. Outside Asia, few are on track to meet the Millennium Development Goals concerning poverty reduction and, in parts of sub-Saharan Africa, hunger remains a very serious problem. That region is also heavily burdened by the HIV/AIDS epidemic, which has multiple, profound implications for its socio-economic development prospects. While certain countries in other regions are on the cusp of an HIV/AIDS epidemic, decisive measures could still avert a full-blown crisis. Child mortality has been reduced in the 1990s, but only accelerated progress will achieve the relevant Millennium Development Goals, and maternal mortality has seen little improvement. In the area of education, some regions have made significant progress in expanding enrolments, particularly at secondary level, and in moving towards gender parity.

Progress has been especially slow in the international economic arena, as evidenced by the stalling of the Doha Round of trade negotiations. Also, whereas foreign direct investment had been considered a relatively stable source of financing to developing countries at the height of the financial crises of the late 1990s, more recently some regions have experienced sharp declines in inflows, while overseas remittances have proven more stable — at least for those countries with large populations resident abroad. Two relatively bright spots have been recent increases in real official development assistance flows from member countries of the Development Assistance Committee of the Organisation for Economic Cooperation and Development, and substantially increased funding for the fight against HIV/AIDS.

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# I. Introduction

1. At its eleventh session, the Commission on Sustainable Development requested the Secretary-General to prepare, for the 2004 review session, state-of-implementation reports reflecting overall progress in the implementation of Agenda 21,[1] the Programme for Further Implementation of Agenda 21[2] and the Johannesburg Plan of Implementation,[3] also identifying new challenges and opportunities related to implementation.[4] Detailed reviews of progress in implementation in the selected thematic clusters for the 2004-2005 cycle — water, sanitation and human settlements — are provided in other reports of the Secretary-General (see E/CN.17/2004/4-6).

2. The present report covers other issues addressed in the Johannesburg Plan of Implementation, Agenda 21 and the Programme for the Further Implementation of Agenda 21, with a particular focus on time-bound targets and issues on which there have been important recent developments relating to implementation. As implementation of Agenda 21 and the Programme for the Further Implementation of Agenda 21 was extensively reviewed as part of the preparations for the World Summit on Sustainable Development, primary reference here is to the Johannesburg Plan of Implementation, although the other two are also mentioned as appropriate.

3. Particular attention is given here to the integration of the social, economic and environmental dimensions of sustainable development and to the cross-cutting issues, noting that the various targets are interdependent. For instance, achieving universal primary school enrolment may depend on improvements to rural roads and increases in family incomes as well as on expansion of schools; gender parity in education may depend on convenient access to safe water, freeing girl children's time to attend school. Improved sanitation is a major factor in reducing infant and child mortality. In a longer-term perspective, biodiversity conservation may be crucial to finding new treatments for diseases like malaria and HIV/AIDS. In some circumstances, there may also be conflicts among different targets and objectives, for example, when investments in road networks to increase income-generating opportunities also intensify deforestation pressures.

# II. Poverty eradication and socially inclusive development

4. The eradication of poverty and hunger and universal access to basic health care and education are at the core of sustainable development, as indicated in Agenda 21, the Programme for the Further Development of Agenda 21 and the Johannesburg Plan of Implementation. The Johannesburg Plan of Implementation reaffirmed a number of poverty-related commitments and targets from the United Nations Millennium Declaration,[5] including the following: to halve, by 2015, the proportion of the world's people whose income is less than one dollar a day, the proportion of people who suffer from hunger, and the proportion of people without access to safe drinking water (Johannesburg Plan of Implementation, para. 7 (a)); to ensure that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and have equal access to all levels of education (para. 7 (g)); to achieve, by 2020, a significant improvement in the lives of at least 100 million slum-dwellers (para. 11); and to reduce, by 2015, mortality rates for infants and children under five years by two thirds, and maternal mortality rates by three

quarters (para. 54 (f)). In addition, the Summit adopted a new goal: to halve, by 2015, the proportion of people without access to basic sanitation (para. 25). The goals relating to safe drinking water, basic sanitation and slum-dwellers are addressed in the reports on water, sanitation and human settlements, respectively.

## A. Reductions in poverty and hunger

5. Good progress towards the poverty-related Millennium Development Goals in some regions indicates that they could be reached at the global level. At current rates, however, other regions are likely to fall well short. The Secretary-General has concluded that a sustained, broad-based increase in per capita income of 3 per cent would be needed to lift people out of poverty at a rate sufficient to meet the 2015 poverty-reduction target (see A/58/323, para. 51). Economic growth, however, has slipped since the United Nations Millennium Declaration was adopted, particularly for developing countries. After growing at an average of 2.8 per cent per year during the 1990s, per capita income in developing countries increased at 1.7 per cent per year in the period 2000-2003.

6. Progress towards the poverty-reduction target at the global level is attributed mainly to progress in China and India, which together include almost half of the world's people living on less than a dollar a day. In East Asia and the Pacific, the proportion of poor people declined dramatically, from 29.4 per cent in 1990 to 14.5 per cent in 2000, already fulfilling the 2015 target.[6] In South Asia, the poverty rate fell from 41.5 to 31.9 per cent, on track to meet the 2015 target. In Latin America and the Caribbean, however, poverty remained constant at about 11 per cent, while in Africa, where almost half of the population is living in poverty, the poverty rate increased.

7. On the target of halving the proportion of hungry people by 2015 the latest estimates show a mixed picture. Over the past two decades there has been substantial progress, with the number of hungry people in the developing world declining by roughly 120 million to around 800 million in 1999-2001.[7] Most of that progress was in the 1980s, however, while in the 1990s the number of undernourished people in developing countries decreased by only 19 million, an average of 2.1 million per year. To achieve the 2015 target, progress needs to be accelerated to 26 million per year, more than 12 times the current pace.[8] East and South-East Asia are on track to meet the target, and there has been some progress since 1990 in Latin America and the Caribbean. In sub-Saharan Africa and West Asia, however, hunger has increased over the past decade.[8]

8. The hunger picture in developing countries since 1980 is composed of opposing trends: with China included, hunger showed a steep decline in the 1980s and a shallower one in the 1990s. With China excluded, there was a slight increase in hunger in the 1980s and a steep one in the 1990s.[9] Progress in India on hunger reduction in the first half of the 1990s was largely reversed in the second half, reflecting in part the effects of prolonged drought and of flooding in some northern States.[10] More recently, the food situation has dramatically improved. In much of Africa, the hunger situation deteriorated throughout the decade and, in the period 1999-2001, the malnourished proportion of the population was around 40 per cent in East and Southern Africa and almost 60 per cent in Central Africa — by far the highest in the world. In addition to 26 countries where the number of hungry people

increased throughout the 1990s, in 17 countries (including large ones like India, Indonesia, Nigeria and Pakistan) a downward trend in the early 1990s was reversed thereafter. The countries that saw hunger decrease throughout the decade had a significantly faster per capita gross domestic product and agricultural output growth, slower population growth, lower rates of HIV infection and fewer food emergencies than those that saw hunger steadily worsen.[10]

9. A number of natural, social and environmental factors contribute to continued food insecurity. Roughly 1.8 billion people, many of them poor, live on lands that are characterized by poor soils, low and unstable rainfall, steep slopes and short growing seasons, and/or that are poorly served by infrastructure and service support (e.g., roads, irrigation, markets, research and extension, credit, etc.).[11] Inadequate land tenure arrangements are another major obstacle to food security. Secure access to land is particularly important for enhancing food security of vulnerable groups, including forest dwellers, pastoralists, indigenous peoples and women. Providing more equitable and secure access to land by the poor and landless usually requires changes in national policies and legislation as well as in local institutions.[8]

10. The challenge of meeting the food security Millennium Development Goal is complicated by several adverse trends: declining investments in agricultural research; growing water scarcity in some parts of the world due to population growth (discussed in the companion report on water); climate change, which is expected to manifest itself as more extreme weather in many tropical countries; and the HIV/AIDS epidemic.[12] By one set of baseline projections, it could take almost until 2050 to halve the proportion of malnourished children in the world from the 31 per cent figure of 1997 (more than a three decade delay in achieving the Millennium Development Goal).[12] For each of the challenges mentioned, there is a corresponding opportunity to accelerate progress towards hunger eradication, though seizing them will require not only strong political will but sizeable resource commitments.

## B. Health and sustainable development

11. A healthy population is a central goal of human development. Good health is also increasingly understood to be an important determinant of human productivity. The Johannesburg Plan of Implementation, in paragraphs 53 and 54, stresses the need to address the causes of ill health, including environmental causes, as well as to strengthen the capacity of health-care systems to deliver affordable, efficient services. Among the serious health threats facing the populations of developing countries, two stand out as major contributors both to the burden of disease and to mortality: respiratory disorders (including infections) and HIV/AIDS. The former account for 13.2 per cent of global deaths and the latter for 4.9 per cent.[13] In Africa, HIV/AIDS-linked morbidity and mortality loom much larger; for this reason, and because there is a specific target in the Johannesburg Plan of Implementation to measure progress in combating HIV/AIDS, much of this section focuses on this epidemic. First, however, progress towards the infant and child mortality and maternal mortality targets (respectively, two thirds and three quarters reductions by 2015 from 2000 rates) is reviewed.

12. Mortality rates for children under five years have dropped by around 12 per cent during the past decade, albeit with large regional differences.[14] Nevertheless, no

region, except possibly Latin America, is currently on track to reach the under-five mortality goal by 2015 (Johannesburg Plan of Implementation, para. 54 (f)). In sub-Saharan Africa, the under-five mortality rate in 2002 was almost double the average for developing countries.[15] Roughly one in six children in Africa does not reach the age of five years, and 24 out of the 25 countries with the highest under-five mortality rates are in sub-Saharan Africa. While deaths from diarrhoeal diseases have been reduced substantially over the past decade, thanks in large part to oral rehydration therapy, there are still 1.8 million a year, and childhood diseases — foremost among them measles — claim another 1.4 million lives. Civil disturbances and HIV/AIDS have been particularly important obstacles to reducing child mortality.

13. Globally, little progress has been made on maternal mortality rates over the past two decades (Johannesburg Plan of Implementation, para. 54 (f)). Over half a million women die every year in pregnancy or childbirth, a ratio of 400 deaths per 100,000 live births. Regional differences are large, however, reflecting both different fertility rates, differences in access to trained health personnel and access to emergency care. Whereas in Africa 1 in every 20 women dies in pregnancy or childbirth, in Europe it is 1 in 2,400 (see table 1).[16]

Table 1
**Maternal mortality indicators, 2000**

| | *MMR[a] per 100 000 live births* | *Absolute number* | *Lifetime risk (1 in : )* |
|---|---|---|---|
| **World** | 400 | 529 000 | 74 |
| **Developed regions** | 20 | 2 500 | 2 800 |
| Europe | 24 | 1 700 | 2 400 |
| **Developing regions** | 440 | 527 000 | 61 |
| **Africa** | 830 | 251 000 | 20 |
| Northern Africa | 130 | 4 600 | 210 |
| Sub-Saharan Africa | 920 | 247 000 | 16 |
| **Asia** | 330 | 253 000 | 94 |
| Eastern Asia | 55 | 11 000 | 840 |
| South-Central Asia | 520 | 207 000 | 46 |
| South-East Asia | 210 | 25 000 | 140 |
| Western Asia | 190 | 9 800 | 120 |
| **Latin America and the Caribbean** | 190 | 22 000 | 160 |
| **Oceania[b]** | 240 | 530 | 83 |

[a] Maternal mortality ratio.

[b] Japan, Australia and New Zealand have been excluded here and included, with Canada, Europe and the United States of America in developed regions.

*Source*: World Health Organization (WHO), United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA), Maternal mortality in 2000.

14. The number of people living with HIV/AIDS increased by an estimated 2 million in 2003 to about 40 million, as a result of 5 million new infections and 3

million deaths from AIDS-related causes.[17] The 2003 *AIDS epidemic update* notes that: "Globally, the AIDS response is moving into a new phase. Political commitment has grown stronger, grass-roots mobilization is becoming more dynamic, funding is increasing, treatment programmes are shifting into gear, and prevention efforts are being expanded. ... But, measured against the scale of the global epidemic, the current pace and scope of the world's response to HIV/AIDS fall far short of what is required".[17] The goal of reducing HIV prevalence by 25 per cent in the most affected countries by 2005 (Johannesburg Plan of Implementation, para. 55) is unlikely to be met. Stigma and discrimination rank high among the obstacles that hinder efforts to meet the goal. A few countries, including Cambodia, Senegal, Thailand and Uganda, have demonstrated that concerted efforts can reduce the spread of HIV/AIDS.

15. Two thirds of people living with HIV/AIDS, and almost two thirds of the new HIV infections in 2003 are in sub-Saharan Africa. However, the highest growth rates in new infections were reported in Eastern Europe and Central Asia, and in East Asia.[17] Life expectancy has fallen by more than 10 years in the most affected countries since the beginning of the epidemic.[18]

16. Globally, only about 7 per cent of the people who need anti-retroviral treatment have access to it; in sub-Saharan Africa, it is only about 2 per cent (see box 1 on new initiatives). The decision on the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and Public Health reached in August 2003 now allows developing countries to import generic drugs for such purposes if they lack capacity to produce them (Johannesburg Plan of Implementation, para. 100). The Agreement will reduce the costs for anti-retroviral treatment substantially, but for many of the poorest countries, drug costs could remain prohibitive. Moreover, improved availability of anti-retroviral drugs will need to be accompanied by improvements in health-care systems, which in many countries lack trained doctors and nurses as well as infrastructure to cope with the increasing demands from HIV/AIDS.[19] There is also still an urgent need for HIV/AIDS prevention measures. Currently less than 1 in 4 people at risk of infection have access to basic information regarding HIV/AIDS (see A/58/184, para. 8). The prevention effort faces the challenge of having to address a broader audience as the epidemic spreads from high-risk groups to the general population.

17. The vast majority of people living with HIV/AIDS are in their productive prime, and the effects of HIV/AIDS are first visible at the household level, where income loss, costs of medication and other costs are pushing many families into poverty.[20] Economic development is retarded owing to a loss of productive labour, reduced consumption attributed to a drop in household income and direction of scarce financial resources towards caring for the infirm.[20] Education systems are suffering from both a loss of trained, experienced teachers and children dropping out.[21] Particularly affected are 13 million children under 15, 11 million in sub-Saharan Africa who have lost one or both parents to HIV/AIDS. HIV/AIDS is thus undermining efforts on the commitments to education, poverty reduction and economic development.

Box 1
**New initiatives in treatment of HIV/AIDS**

Treatment of HIV/AIDS and access to anti-retroviral treatment in poor countries, which has long been considered beyond those countries' means, have more recently moved to the centre of discussion. Much progress has been made in providing affordable treatment. While in early 2000 the annual anti-retroviral treatment cost was $10,000 to $12,000 per person, the price dropped to $500-$800 in late 2000 and to $675 for brand name drugs and $300 for generic drugs in May 2003. The Clinton Foundation recently reached an agreement with Indian and South African companies to provide anti-retroviral treatment for 37 cents per day per person (or $135 per year). While still high relative to per capita income of many poor countries, treatment costs can be expected to fall further, becoming a less formidable obstacle to treatment and highlighting others — notably the weakness of national health sectors and the lack of trained doctors and nurses.

On 1 December 2003, WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) released a plan to provide anti-retroviral treatment to 3 million people in developing countries and to countries with economies in transition by 2005. Implementation of the strategy, which includes the provision of simplified, standardized tools to deliver anti-retroviral therapy, a new service to ensure access to quality medicines and diagnostic tools at the best prices, and the training of thousands of community health workers, will require about $5.5 billion funding over the next two years.

*Sources*: Fact sheet on Access to HIV Treatment and Care, UNAIDS; "India plans free AIDS therapy, but effort hinges on price accord with drug makers", *The New York Times*, 1 December 2003; and WHO press release, 1 December 2003.

18. Political and financial support for the fight against HIV/AIDS has been growing substantially in recent years, and virtually all heavily infected countries now have multisectoral HIV/AIDS strategic plans (Johannesburg Plan of Implementation, para. 55 (a)). About $4.7 billion from domestic and international sources will be spent on AIDS programmes in low and middle-income countries in 2003, a 20 per cent increase compared with 2002 and a 500 per cent increase over 1996.[22] International assistance to combat HIV/AIDS rose more than eight-fold from $297 million in 1996 to $2.5 billion in 2003. Announced United States and European Union increases in funding for the fight against HIV/AIDS would raise annual spending by another $1.2 billion by 2005. Yet, the amount would still fall far short of the $10.5 billion annually deemed necessary to fight the epidemic effectively in low and middle-income countries.[23] The Global Fund to Fight AIDS, Tuberculosis and Malaria is still short of the $3 billion required for 2004 and the $4.5 billion required for 2005.[24]

### C. Education for sustainable development

19. Expanding access to education is identified in Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation as essential for sustainable development. Current data suggests that about half of all countries, including over 60 per cent of the world's population, are likely to miss at least one of the three goals for education — universal primary net enrolment, improvement in adult literacy and gender parity in education.[25] High-risk countries are concentrated in South and West Asia, sub-Saharan Africa and North Africa.

20. All regions had either high or increasing primary enrolment ratios during the 1990s, although ratios in sub-Saharan Africa remain low, with less than 60 per cent of primary school-aged children in school in 2001. Total primary school enrolment in developing countries increased from 80 per cent in 1990-1991 to 82 per cent in 2000-2001. At this rate, however, most countries that have not yet achieved the goal of universal primary education (Johannesburg Plan of Implementation, para. 116 (a)) will not do so by 2015.[26] As the opportunity costs to poor families of children's school attendance are the greatest obstacle to increasing enrolments, poverty reduction is essential to achieving the goal.[27]

21. Gender parity in education (Johannesburg Plan of Implementation, para. 120) improved during the 1990s, with the global ratio of girls-to-boys enrolment in primary education increasing from 0.89 in 1990 to 0.93 in 2000. The largest improvements were in Arab States, with an increase from 0.80 to 0.89, and in South and West Asia from 0.76 to 0.84.[28] However, at least 50 countries have a high risk of not achieving gender parity in primary education in either 2005 or 2015.[26] At the secondary level, gender parity improved in all developing regions during the 1990s, but countries that have a large disparity at primary level have an even larger disparity at secondary level.[29] Still, the Arab States and West Asia also achieved dramatic improvements in female secondary enrolment.

22. In its resolution 57/254, the General Assembly proclaimed the United Nations Decade of Education for Sustainable Development starting in 2005 (Johannesburg Plan of Implementation, para. 124 (d)). In August 2003, the United Nations Educational, Scientific and Cultural Organization (UNESCO) presented a framework for international implementation of the Decade, with four major thrusts: promotion and improvement of basic education; mainstreaming of sustainable development in existing education programmes; development of public understanding and awareness of sustainability; and training of workforces to perform their work in a sustainable manner.[30] The framework is the basis for a consultative process to develop the implementation scheme, which UNESCO will present to the General Assembly in 2004.

## III. Protecting and managing the natural resource base

23. As noted above, freshwater management is addressed in detail in another report of the Secretary-General (E/CN.17/2004/4), while oceans and fisheries are treated here. In terms of employment if not output in much of the developing world, agriculture remains a dominant economic sector whose development is crucial to poverty reduction and hunger alleviation. The preponderance of poverty remains in

rural areas. Issues related to agriculture are addressed in other sections of the present report, in particular those on hunger and food security above and trade below, and also in the companion reports, notably in the report on freshwater management (E/CN.17/2004/4), in its consideration of irrigation.

## A. Oceans

24. In the effort to reduce marine pollution, 80 per cent of which arises from land-based activities, implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities has focused on the Strategic Action Plan on Municipal Wastewater (United Nations Environment Programme (UNEP)/Water Supply and Sanitation Collaborative Council/WHO/United Nations Human Settlements Programme (UN-Habitat)); prevention of physical alteration and destruction of habitats; and national programmes of action to implement the Global Programme (Johannesburg Plan of Implementation, para. 33). Since the World Summit on Sustainable Development, substantial progress has been made in the development of national programmes of action, in many cases with international assistance. To facilitate their development, the Global Programme office has published a handbook on the development and implementation of national programmes of action,[31] and progress will be evaluated at the International Hilltops to Oceans Conference to be held in May 2004[32] as part of the World Summit on Sustainable Development Hilltops to Oceans Partnership Initiative.

25. With the rapid increase in international sea-borne trade and larger and faster vessels, the introduction of alien invasive species into new environments through the release of ballast water has become the greatest threat to the marine environment from shipping activities, threatening the livelihoods of fishers and harming vulnerable fishing communities.[33] A diplomatic conference is to be held in February 2004 under the auspices of the International Maritime Organization and is expected to adopt an international convention for the control and management of ships' ballast water and sediments (Johannesburg Plan of Implementation, para. 34 (b)).

26. Marine and coastal protected areas are an important tool in the fight against marine degradation. Studies have shown that such areas benefit a variety of species in different habitats, while generating economic benefits as depleted fish stocks recover (Johannesburg Plan of Implementation, para. 32 (d)). At its seventh meeting, the Conference of the Parties to the Convention on Biological Diversity, in February 2004, will consider the establishment of new marine and coastal protected areas and the improved effectiveness of existing ones (see A/58/191, para. 28). At its September 2003 meeting, the World Parks Congress endorsed the target of establishing at least five ecologically significant high seas marine and coastal protected areas by 2008.[34] Enforcement of the protected status of high-seas areas may pose a challenge, however.

27. In its resolution 58/240 of 23 December 2003, the General Assembly addressed the sustainable use of oceans and called for the establishment by 2004 of a regular process under the United Nations for global reporting and assessment of the state of the marine environment (Johannesburg Plan of Implementation, para. 36 (b)). Work is also under way to strengthen United Nations inter-agency coordination (Johannesburg Plan of Implementation, para. 30 (c)) through the United Nations System Chief Executives Board for coordination.

## B. Fisheries

28. The implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation in the area of fisheries has not been sufficient to reverse the depletion of ocean fisheries. Globally, more than 75 per cent of fish stocks are overfished, exploited to their maximum biological limits or recovering from depletion.[35] With more than 90 per cent of global fish stocks under national jurisdiction, national implementation of international fisheries agreements[36] is key to restoring fish stocks to levels that can produce maximum sustainable yield by 2015 (Johannesburg Plan of Implementation, para. 31). Since the World Summit on Sustainable Development, 20 additional countries and the European Commission have ratified the 1995 United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, increasing the total number of parties to 51, and the General Assembly, in its resolution 58/14, approved the terms of reference for an Assistance Fund to facilitate developing countries' implementation of the Agreement. Some progress towards the sustainable management of the marine environment has also been made with the entry into force in April 2003 of the Food and Agriculture Organization of the United Nations (FAO) Compliance Agreement. However, of the 36 States that have ratified or acceded to the Fish Stocks Agreement, only 9 have also accepted the Compliance Agreement.[37]

29. Strategies for sustainable fisheries management can only be effective if the issue of illegal, unreported and unregulated fishing is also tackled. Few, if any, developing countries, and only a limited number of developed countries, are expected to meet the 2004 deadline for putting into effect the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Johannesburg Plan of Implementation, para. 31 (d)).[37] To date only two countries have reported national programmes of action, while the European Community, as part of its Common Fisheries Policy, has adopted a policy on illegal, unreported and unregulated fishing that underpins the elaboration of national programmes of action.[37] Efforts are under way to help developing countries in designing national programmes of action. Obstacles to the implementation of the Code of Conduct for Responsible Fisheries and related international plans of action are a lack of political will and an inability or unwillingness of some flag States to exercise full and effective control over their fishing vessels in accordance with international law.[38]

30. Progress has been made towards the 2005 target for the implementation of the international plan of action for the management of fishing capacity (Johannesburg Plan of Implementation, para. 31). Since 1991, the stock of large fishing vessels has decreased and there is an even steeper drop in the construction rate.[39] Yet, the number of smaller coastal vessels operating in or close to the exclusive economic zones has continued to expand. Obstacles to better management of fishing capacity include fishery subsidies and a lack of incentives for scrapping vessels. With the breakdown of trade negotiations at Cancun, negotiations in the World Trade Organization (WTO) on the reform of fisheries subsidies have stalled. Within FAO, however, experts have agreed on a methodology to establish the magnitude of subsidies and their impact on trade and discussions on subsidies will continue.[40]

31. Demand for fish is projected to increase by one third by 2020, mainly because of the growing demand in developing countries. With capture fisheries at or beyond the limit of sustainable yield in various regions, the bulk of the required production increase will have to come from fish farming or aquaculture.[41] At present, however, the aquaculture industry is not operating in a sustainable manner, particularly because farmed fish require up to four times as much fish feed as capture fish and because the expansion of aquaculture often results in degradation of vulnerable marine and coastal areas. To support the development of sustainable aquaculture (Johannesburg Plan of Implementation, para. 32 (h)), efforts are under way to develop guidelines for the responsible management of fish farms, international standards for the safety of fish products and a single set of science-based labelling standards.

## C. Atmosphere and climate

32. As of February 2004, the Kyoto Protocol to the United Nations Framework Convention on Climate Change had been ratified by 120 countries, accounting for 44.2 per cent of the 1990 carbon dioxide emissions by industrialized countries (Annex I countries). The Protocol is to come into force after ratification by 55 countries, accounting for 55 per cent of the industrialized country emissions, which will require ratification by either the United States or the Russian Federation. The challenge for Annex I countries that have ratified the Protocol is whether and how to implement its provisions before, or in the absence of, entry into force. Some countries — and the European Union — are now establishing legislation, regulations and mechanisms, such as emissions trading schemes, to reduce greenhouse gas emissions in accordance with the provisions of the Protocol.

33. Overall greenhouse gas emissions of industrialized countries declined by 6.6 per cent between 1990 and 2001.[42] Total emissions of countries with economies in transition decreased by 40 per cent, while the total emissions of other industrialized countries increased by 7.5 per cent. Greenhouse gas emissions from all industrialized countries are projected to increase over the period 2000-2010 to about 10 per cent above 1990 levels under business-as-usual policies, in part owing to the economic recovery in countries with economies in transition.

34. The ninth Conference of the Parties to the United Nations Framework Convention on Climate Change was held in December 2003. While no progress was made in reducing uncertainty surrounding the entry into force of the Kyoto Protocol, a major advance was the agreement on modalities and scope for including large-scale carbon-absorbing forest-management projects in the Clean Development Mechanism during the first commitment period (2008-2012).

35. Progress was also made at the ninth Conference in elaborating the modalities for funding adaptation to climate change in developing countries. In particular, the Subsidiary Body for Implementation reached agreement on the main outlines and purposes of the Special Climate Change Fund,[43] which is intended to support implementation of activities to help developing countries cope with and adapt to adverse impacts of climate change, to improve disease monitoring and early warning systems and to undertake capacity-building. It is intended to serve as a catalyst to leverage additional resources from bilateral and multilateral sources, with activities to be funded being country-driven, cost-effective and integrated into national

sustainable development and poverty reduction strategies. In relation to the Least Developed Countries Fund, a large number of national action plans on adaptation are due to be completed in 2004.

36. For the Montreal Protocol on Substances that Deplete the Ozone Layer, which has entered into force and is being implemented, a particular challenge is to provide assistance to developing countries by ensuring adequate replenishment of its fund (Johannesburg Plan of Implementation, para. 39 (b)). Funding for the period 2003-2005 is particularly important as developing countries are required to cut the use of key ozone-depleting substances by 2005. The budget for 2003-2005 adopted at the November 2002 Meeting of the Parties to the Montreal Protocol is $573 million, representing an increase of roughly $100 million over the previous budget.

37. The abundance of ozone-depleting compounds in the lower atmosphere continues to decline slowly from the 1992-1994 peak. With regard to chlorofluorocarbons, halons, carbon tetrachloride and methyl chloroform, it appears technically and economically feasible for developing countries and countries with economies in transition to phase them out by 2005 as required by the Protocol.[44] This would, however, require accelerated investments to change to ozone-depleting substances-free technologies, as well as accepting the transitional use of hydrochlorofluorocarbons, in all industries and processes now using ozone-depleting substances. The phase-out of hydrochlorofluorocarbons in new equipment and in servicing old equipment by 2005 in industrialized countries is technically feasible but expensive with the technology available today. It might also result in increased energy consumption and greenhouse gas emissions as key alternatives to ozone-depleting substances, such as hydrofluorocarbons, are high in global warming potential. Assessment of the issue of safeguarding the ozone layer and the global climate system, focusing on hydrofluorocarbons and perfluorocarbons, is currently being undertaken jointly by the Intergovernmental Panel on Climate Change and the Technical and Economic Assessment Panel of the Montreal Protocol. The phase-out of methyl bromide will be one of the main challenges in the coming years.

## D. Biodiversity

38. Over the past three decades, declines and extinctions of species have emerged as a major concern. The latest Red List of Threatened Species, compiled by the World Conservation Union, indicates that about 23 per cent (1,130) of mammals and 12 per cent (1,194) of bird species are currently threatened.[45] In addition, the Living Planet Index, developed by UNEP and the World Conservation Monitoring Centre in cooperation with the World Wildlife Fund (WWF) in order to track trends and variations in species populations, declined by about 35 per cent between 1970 and 2000 — 15 per cent for forest species populations, 35 per cent for marine species and 55 per cent for freshwater species. This rate of biodiversity loss is considered comparable with the mass extinction events that have occurred only five or six times in the history of the Earth.[46]

39. On biodiversity policy, the major development following the World Summit on Sustainable Development has been additional ratifications of the Cartagena Protocol on Biosafety, enabling it to enter into force in September 2003 (Johannesburg Plan of Implementation, para. 44). The first meeting of the Parties to the Protocol will convene in February 2004.

40. A particular challenge in relation to biodiversity will be the development of an international regime to promote the fair and equitable sharing of benefits arising out of the utilization of genetic resources, an issue under consideration within the context of the Convention on Biological Diversity as part of the international efforts to meet the Johannesburg Plan of Implementation target of reducing biodiversity loss by 2010 (para. 44) (see A/58/191). The seventh meeting of the Conference of the Parties to the Convention, to be held in February 2004, will consider the process and modality of negotiation of such a regime.

41. The Group of Like-Minded Megadiverse Countries, composed of 14 developing countries with high biodiversity, was formed in February 2002 as a mechanism for consultation and cooperation to promote their interests and priorities related to the preservation and sustainable use of biological diversity. The members of this group represent 70 per cent of the world's biological diversity and 45 per cent of its human population. They have held several meetings to promote the development of an international regime designed to achieve a fair and equitable sharing of benefits arising from the use of biodiversity and its components.

42. Presently, scientific understanding of the ecological, social and economic implications of biodiversity loss is limited and scattered. The Millennium Ecosystem Assessment[47] is designed to further this understanding through a global research endeavour involving leading scientists (roughly analogous to the Intergovernmental Panel on Climate Change). The first product of this effort — consisting of a conceptual framework — was published in September 2003, and draft chapters of the full assessment report were circulated for a first peer review on 12 January 2004.

## E. Forests

43. Efforts to promote international cooperation on sustainable forest management, implement the proposals for action of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests, and improve reporting are being undertaken by the United Nations Forum on Forests, and an assessment of progress is planned for 2005 (Johannesburg Plan of Implementation, para. 45).

44. The Collaborative Partnership on Forests, including 14 major forest-related international organizations, is supporting the United Nations Forum on Forests and implementation of the Johannesburg Plan of Implementation. Among other joint initiatives, it has established a sourcebook on funding sustainable forest management; a task force on streamlining forest-related reporting; and a web site that includes a portal on reporting.

45. By June 2003, the Global Environment Facility (GEF) had committed more than $777 million for environmental projects relating to forests, leveraging nearly $2 billion in partner co-financing. With the decision to include land degradation as a GEF focal area, GEF expects to commit about $250 million between 2003 and 2006 for projects on land degradation, with a focus on desertification and deforestation.

46. More than 150 countries encompassing 85 per cent of the world's forests continue to be actively involved in nine international processes relating to criteria and indicators for sustainable forest management. Despite varying degrees of implementation among countries, real advances have been made in developing

criteria and indicators for monitoring the effects of interventions and assessing progress over time.

47. National forest programmes are also gaining momentum (box 2), especially since the establishment of the FAO-hosted National Forest Programme Facility — a partnership of countries, international organizations and non-governmental organizations that focuses on information exchange, knowledge-sharing and capacity-building to ensure broad and meaningful participation in forest deliberations at the national level. The Programme on Forests hosted by the World Bank has also strengthened the development and implementation of national forest programmes in several countries.

48. However, despite these and other positive developments, deforestation and forest degradation are continuing at alarming rates. The biggest challenge in moving forward is securing long-term political commitment at the highest levels for sustainable forest management.

Box 2

**Technology and the control of illegal logging in the Brazilian Amazon**

IBAMA, Brazil's environmental protection agency, is stepping up its fight against deforestation, which was estimated by the National Space Research Institute at 25,500 square kilometres from August 2001 to August 2002, a 40 per cent increase over the year-earlier period, with a further increase expected in 2003. The central Government has given an emergency grant equivalent to $7 million to IBAMA to fund monitoring operations, with a focus on critical areas. Both remote sensing and field information are being used for monitoring. Rather than simply suspending illegal projects after inception, IBAMA is aiming at a pre-emptive approach. It is establishing a unified rural property licensing system, which uses satellite mapping technology to record the environmental conditions of properties, specifying in the licence details of the areas being exploited, areas to be exploited and those areas to be preserved according to current legislation. For example, the Brazilian Forest Code specifies that in Amazonia 80 per cent of woodland on any property cannot be cleared. Satellite monitoring then permits regular updating of information on the status of different properties and timely verification of illegal logging activities. IBAMA is also building a network of non-governmental organizations to help the agency to track down environmental crimes as well as educate the public.

Having pioneered the licensing system in the state of Mato Grosso, the Ministry of the Environment has negotiated its use, from 2002 onwards, in two other Amazonia states (Pará and Rondônia) with high deforestation rates, and eventually plans to institute it throughout the region.

*Sources*: Brazilian Embassy in London (see www.brazil.org.uk); and INPE web site (www.obt.inpe.br/prodes/index.html).

## F. Mountain areas

49. For the International Year of Mountains in 2002, 78 national committees or similar mechanisms were established, and many have evolved into permanent bodies to help develop and implement sustainable development strategies for mountain areas. The Mountain Forum played a major role during the Year, facilitating networking and information exchange among individuals, non-governmental organizations, Governments and other entities, and mobilizing international support for the sustainable development of mountain ecosystems (Johannesburg Plan of Implementation, para. 42). In November 2002, the Bishkek Mountain Platform was adopted, providing guidelines on improving the livelihoods of mountain people, protecting mountain ecosystems, and using mountain resources more wisely.

50. The International Partnership for Sustainable Development in Mountain Regions was launched at the World Summit on Sustainable Development in order to achieve the mountain-specific goals of the Summit, focusing on poverty and food security in mountain communities and the protection of fragile mountain ecosystems. The Partnership will build on the Inter-Agency Group on Mountains to promote alliances that link global, national and local initiatives for sustainable mountain development.

## G. Desertification

51. A major achievement in the implementation of Agenda 21 was the adoption of the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa in 1994 and its entry into force in 1996. Until recently, however, lack of stable, predictable and substantial financial resources severely limited the Convention's implementation (Johannesburg Plan of Implementation, para. 41). By June 2003, a total of $6.7 million had been contributed by various donors to the Special Resources for the Convention to Combat Desertification Finance Account set up under the Convention, for use mainly in formulating national and regional action programmes. In October 2002, the GEF Assembly designated land degradation, primarily desertification and deforestation, as a focal area and, in September 2003, the Conference of the Parties to the Convention designated GEF as a financial mechanism of the Convention. GEF has now initiated a new operational programme on sustainable land management to mitigate the causes and impacts of land degradation on ecosystem stability, functions and services. As noted in paragraph 45, GEF expects to commit more than $250 million between 2003 and 2006 for land degradation projects focusing on desertification and deforestation, with another $250 million to fund other projects that will mitigate land degradation.

52. Major GEF projects related to desertification launched since the World Summit on Sustainable Development include: (a) the Desert Margins Programme, launched in November 2002 to arrest land degradation and conserve biodiversity in Africa's desert margins; (b) the Land Use Change Analysis as an Approach for Investigating Biodiversity Loss and Land Degradation, to help identify and monitor landscape changes associated with biodiversity loss and land degradation, and the causes of those changes; and (c) the Land Degradation Assessment in Drylands, to develop strategies, tools and methods to assess the nature, extent, severity and impacts of land degradation on ecosystems, watersheds and river basins, and carbon storage in

drylands, and to build national, regional and global assessment capacities to mitigate land degradation and establish sustainable land use and management practices.

# IV. Changing unsustainable patterns of consumption and production

53. On average, high-income economies consume more, per capita, of both materials and energy than do low-income economies. They also generate relatively large quantities of waste of all sorts, especially industrial and hazardous wastes. Over the past few decades, Governments of developed countries have instituted policies to encourage reduction of waste and conservation of energy and other resources, with some success.[48] In those countries and regions where incentives to conservation have been strongest (e.g., in the form of high energy taxes), reductions in resource use intensity have been greatest. In the developing world, growing prosperity will mean higher per capita energy and materials consumption, but by learning from the experience of the developed countries and acquiring their technologies, there is the possibility to follow a path of industrial and economic development that is consistently less intensive in resource use and less environmentally destructive than that followed by the early industrializers.

## A. Ten-Year Framework of Programmes for Sustainable Consumption and Production: the Marrakesh Process

54. To promote international cooperation in changing unsustainable patterns of consumption and production, the Department of Economic and Social Affairs, in cooperation with UNEP, organized an International Expert Meeting on a 10-Year Framework of Programmes for Sustainable Consumption and Production at Marrakesh, Morocco, in June 2003 (Johannesburg Plan of Implementation, para. 15).[49] The meeting launched the Marrakesh Process to develop the framework and to coordinate international activities in support of national and regional activities. A number of follow-up actions were identified, including information and experience-sharing, network-building, dissemination of best practices, and regional cooperation.

55. In order to identify regional priorities and promote regional cooperation in Latin America and the Caribbean, expert meetings have been held in Argentina (April 2003) and Nicaragua (October 2003). The Forum of Ministers of the Environment of Latin America and the Caribbean (Panama, November 2003) established a Regional Council of Governmental Experts on Sustainable Consumption and Production. For the Asia-Pacific region, expert meetings have been held in Indonesia (May 2003) and the Republic of Korea (November 2003), and further work is being pursued through the Economic and Social Commission for Asia and the Pacific. Regional expert meetings are planned for Africa, Europe and West Asia, and a second global meeting is planned for 2005. International efforts are under way to promote cleaner production, environmental management accounting, sustainable public procurement, implementation of the United Nations Guidelines for Consumer Protection, and other means of promoting sustainable consumption and production.

## B. Chemicals and hazardous waste

56. The Rotterdam Convention on Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade,[50] with 58 parties as of February 2004, enters into force on 24 February 2004 (Johannesburg Plan of Implementation, para. 23 (a)). Countries have been submitting import responses and notifications at an improving rate. In November 2003, a technical assistance strategy was agreed and six new chemicals were added to the Procedures.

57. The Stockholm Convention on Persistent Organic Pollutants,[51] with 48 ratifications as of February 2004, appears set to achieve the 50 required for entry into force during 2004 (Johannesburg Plan of Implementation, para. 23 (a)), and work on implementation has started. GEF has accepted over 100 proposals for enabling activities to assist countries in the preparation of national implementation plans and over 80 countries have initiated development of national implementation plans.

Box 3
**African pesticide stockpile initiative**

Across the African continent over the past 40 years, an estimated 50,000 tons of obsolete pesticides have accumulated and are leaking into the environment, contaminating soil, water, air and food. The poor suffer most, as dangers from hazardous pesticides are often compounded in poor communities by unsafe water supplies and working conditions, illiteracy and lack of political empowerment. While some progress has been made towards an inventory of pesticide stockpiles, little has been made in cleaning them up. FAO estimates that over the past decade only 3,000 tons have been cleaned up.

To speed up the process and to prevent future accumulation, the African Stockpiles Programme was established as a 12-15 year international initiative. The total cost is estimated at $250 million, with $175 million to $200 million for clean-up and $50 million to $75 million for capacity-building and prevention. In a first phase (2004-2007), Ethiopia, Mali, Morocco, Nigeria, South Africa, Tunisia and the United Republic of Tanzania will clean up obsolete pesticides with assistance from 11 local, regional and international organizations. First-phase costs are an estimated $70 million; by September 2003, GEF had pledged $25 million.

*Source*: www.africastockpiles.org.

58. To foster implementation of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Johannesburg Plan of Implementation, para. 23 (e)), the Conference of the Parties to the Convention, at its sixth meeting, in December 2002, agreed on a strategic plan to 2010 with an action table for 2003-2004. Progress in implementation includes the establishment of a compliance mechanism and the opening of additional regional

centres that are one of the major delivery mechanisms for capacity-building, training and technology transfer for hazardous wastes.

59. With a view to having the Globally Harmonized System of Classification and Labelling of Chemicals, as called for in Agenda 21, fully operational by 2008 (Johannesburg Plan of Implementation, para. 23 (c)), the System was endorsed by the Economic and Social Council in its resolution 2003/64 of 25 July 2003. The United Nations Institute for Training and Research and the International Labour Organization (ILO) are running the System's capacity-building pilot projects in Zambia, South Africa, Senegal and Sri Lanka, and other projects are being planned.[52]

60. The Strategic Approach to International Chemicals Management is being developed to put chemical safety issues in the development mainstream, addressing the three dimensions of sustainable development and involving a wide range of stakeholders. The first meeting of the Preparatory Committee for the Development of a Strategic Approach to International Chemicals Management, held in November 2003, started the substantive development of the Strategic Approach based on inputs from Governments, international organizations and other actors and from the Intergovernmental Forum on Chemical Safety.[53] The process is to culminate in a high-level multisector conference planned for early 2006,[54] with a view to meeting the 2020 target (Johannesburg Plan of Implementation, para. 23 (b)).

## C. Energy

61. Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation all stressed the importance for sustainable development of access to and affordability of environmentally sound energy. (As energy is to be reviewed in depth by the Commission on Sustainable Development at its fourteenth session, it is discussed only briefly here.) Although efforts have been made to improve access to electricity grids, approximately 1.6 billion people — one quarter of the world's population — remain without access to electricity (in sub-Saharan Africa, it is three quarters[55]) and 2.4 billion rely on traditional biomass for cooking and heating. One recent estimate puts total investment to 2030 for refurbishing and expanding electricity capacity in developing countries at $5 trillion to achieve an electrification rate of 78 per cent.[56]

62. A number of initiatives have been taken to promote increased access to reliable and affordable energy for sustainable development and poverty reduction (Johannesburg Plan of Implementation, para. 9). These include the United Nations Development Programme (UNDP)-World Bank Global Village Energy Partnership launched at the World Summit on Sustainable Development to bring together public and private stakeholders to ensure access to modern energy services by the poor. The LPG Challenge, a UNDP-led World Summit on Sustainable Development partnership, aims to improve access to liquified petroleum gas in rural areas. Ongoing forums such as the World Bank's Energy Forum and the Global Forum on Sustainable Energy continue to serve as catalysts for action.

63. The global share of renewable energy — excluding hydroelectricity — in electricity generation is currently 1.7 per cent.[56] To increase the share of renewables in energy supply (Johannesburg Plan of Implementation, para. 20), some countries are promoting renewable energy for the production of electricity with tax and

subsidy incentives as well as legislation, and some have taken steps to encourage the use of ethanol in gasoline.

64. A number of World Summit on Sustainable Development partnerships have been established to promote energy efficiency and cleaner energy technologies. These include the Partnership for Clean Fuels and Vehicles to eliminate lead in gasoline and reduce emissions, and the Collaborative Labeling and Appliance Standards Program, which promotes cost-effective energy-efficiency standards and labels for appliances, equipment and lighting. In addition, the Department of Economic and Social Affairs and E7 are working on a capacity development programme for the Clean Development Mechanism to support developing country efforts to utilize the Mechanism to attract clean energy investments.[57]

## D. Sustainable tourism development

65. In 2002, the international travel and tourism industry generated almost half a trillion United States dollars in revenues from more than 700 million international travellers — with the latter figure expected to more than double by 2020.[58] Ecotourism is one of the fastest growing parts of the industry, albeit from a relatively small base. In many least developed countries, and notably in the small island developing States, tourism is the primary source of foreign exchange. WTO has conducted studies suggesting that, when properly designed and managed, ecotourism can support the protection of biodiversity, create economic opportunities for isolated areas and the poor, and ensure that host communities have a voice in sustainable development. In many areas, it is one of the few feasible economic tools to finance conservation of sensitive ecosystems. WTO, with support from the United Nations Conference on Trade and Development (UNCTAD), is working to channel development assistance funds in the field of tourism towards the alleviation of poverty, with a special initiative for this purpose: sustainable tourism — eliminating poverty.

66. The World Ecotourism Summit, as part of the 2002 International Year of Ecotourism, produced the Quebec Declaration on Ecotourism, which countries are now adapting to their particular conditions (see A/58/96) (Johannesburg Plan of Implementation, para. 43). Some 48 countries have developed national strategies or plans for ecotourism, while several have set up multi-stakeholder committees to coordinate sustainable tourism development and management.

Box 4
**Community-based sustainable tourism in the Bahamas**

One example of a successful community-based sustainable tourism initiative (Johannesburg Plan of Implementation, para. 58 (g)) is Tiamo Resorts in South Andros, Bahamas. In order to preserve the vegetation, it was not built with the usual high-speed, high-tech construction methods but by hand, with local workers using machetes and chainsaws. The guest bungalows were set among the vegetation and built from a non-toxic-treated pine that is harvested from sustainable forests. The resort is the world's first to operate entirely on 100 per cent alternative energy for its electrical needs and creates hot water using solar heaters. Sewage wastewater, which is destructive to near-shore tropical ecosystems, is disposed of using low-flush, composting toilets. Micro-organisms break down the waste into healthy organic peat. "Grey" wastewater from showers, sinks and laundries are filtered for large particles, then sent through a dirt, sand and rock filter system to be cleansed. To minimize waste, biodegradable, phosphorus-free soaps are used. The environmental systems are carefully monitored at all times to ensure that they are working properly. In addition, Tiamo Resorts, in cooperation with the local community, is always looking for new, cost-effective ways to reduce or dispose of waste.

Further success stories are published under www.sidsnet.org/eco-tourism.

*Source*: www.tiamoresorts.com/world2.html.

67. In the context of the Convention on Biological Diversity, draft guidelines have been developed for sustainable tourism development for adoption by the Conference of the Parties to the Convention in February 2004.

## V. Means of implementation

68. The discussion in this section focuses on finance, trade and technology. Education, while a means of implementation, is also a fundamental element of socially inclusive development and thus is addressed in section II above.

### A. Finance

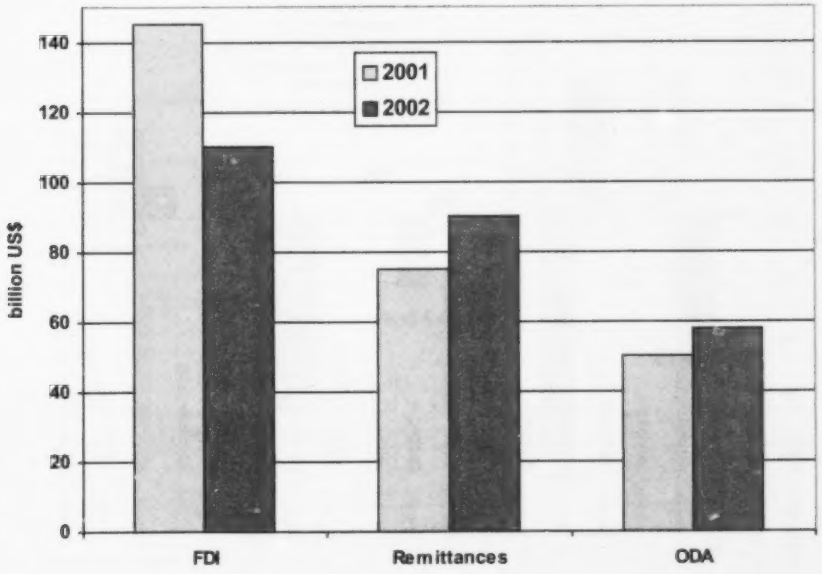
69. Investments to support implementation of sustainable development can be financed by domestic or foreign savings. The global savings rate remained roughly constant at 24 per cent between 1990 and 2001, but with large cross-country differences. In 2001, East Asia had the highest domestic savings rate, at 36 per cent, and sub-Saharan Africa the lowest, at 17 per cent.[59]

70. The Monterrey Consensus noted that corruption could be a serious barrier to effective resource mobilization and allocation. The United Nations Convention

against Corruption was approved by the General Assembly in its resolution 58/4 of 31 October 2003 and was opened for signature from December 2003, as recommended in the Johannesburg Plan of Implementation (paras. 140 and 142). The Convention will enter into force 90 days after ratification by the thirtieth country.

71. Foreign direct investment is the largest source of external finance for developing countries, followed by overseas remittances and then official development assistance (see figure 1). (Net debt flows to developing countries, which collapsed in the late 1990s, have barely returned to positive territory.[60]) Foreign direct investment flows to developing countries were estimated at $156 billion in 2003, down by almost a quarter from the 2001 level.[61] Remittances have been increasing and provide a stable and important source of finance for a number of low-income developing countries. Latin America and the Caribbean receive the largest total amount of remittances, but South Asia receives the most remittances as a share of gross domestic product, at 2.5 per cent. Official development assistance has increased in recent years, after declining in the 1990s, to $58.3 billion in 2002, representing a 7 per cent real increase from 2001.[62]

Figure 1
**Sources of external finance for developing countries, 2001 and 2002**



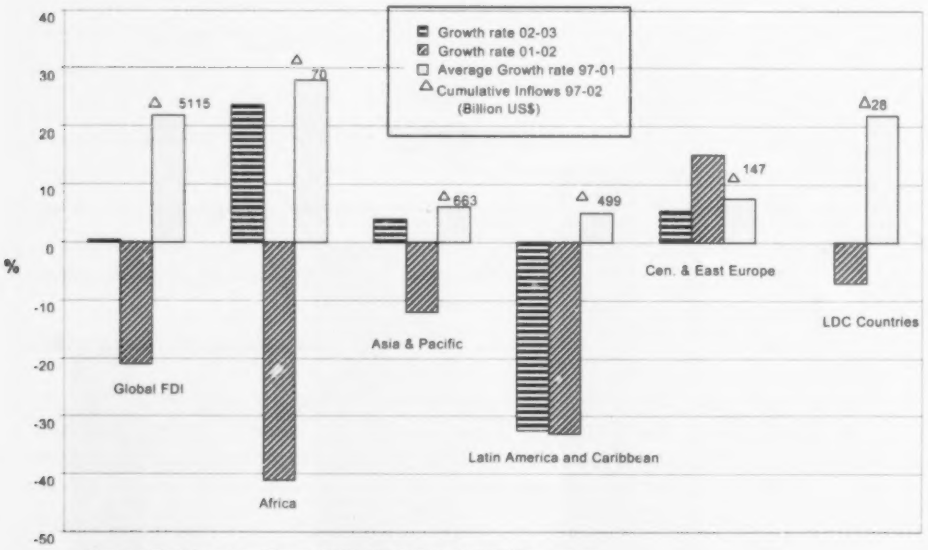

*Sources*: FDI = UNCTAD Remittances = World Bank ODA = OECD

72. At the regional level, in 2003 Latin America experienced a fourth consecutive year of decline in foreign direct investment, with inflows cut roughly in half in a space of two years (see figure 2). Foreign direct investment flows to Africa and Asia recovered somewhat between 2002 and 2003, while those to Central and Eastern

Europe continued to rise. Still, foreign direct investment flows remain highly concentrated, with China (including Hong Kong) accounting for 46 per cent of all foreign direct investment flows to the developing world and foreign direct investment to Africa being concentrated in the oil industry. Foreign direct investment inflows to least developed countries represent less than 1 per cent of global foreign direct investment and about 3 per cent of foreign direct investment to developing countries.[63]

73. Increasing competition for foreign direct investment has led many countries to liberalize foreign direct investment regimes, including through bilateral investment treaties and double taxation treaties. A liberal foreign direct investment regime cannot on its own ensure increased inflows when other factors remain unfavourable — e.g., civil unrest, macroeconomic instability, weak governance, poor infrastructure and low education levels of the workforce. The regulatory environment for business remains restrictive in many countries, discouraging entrepreneurship and leading start-up enterprises to prefer informality.[64]

Figure 2
**Foreign direct investment inflows**



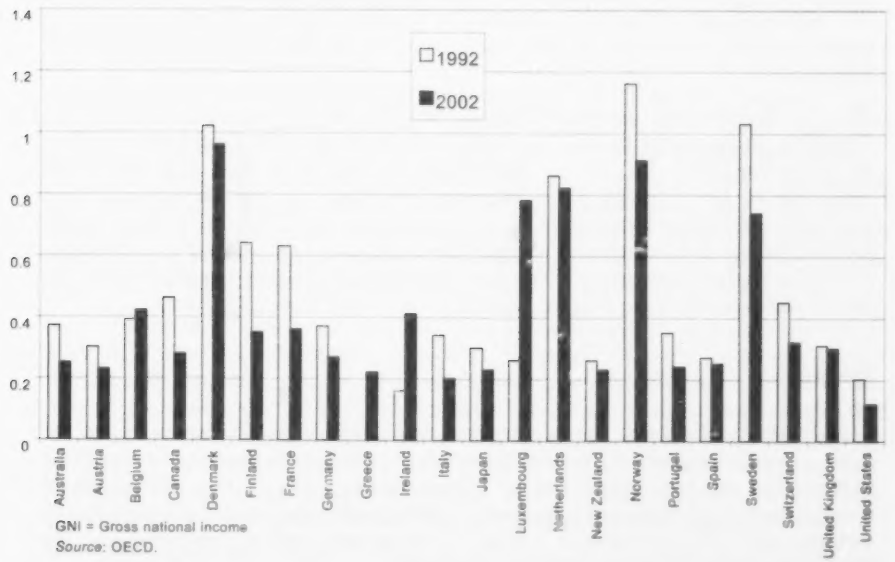

*Sources: World Investment Report (2003)* (UNCTAD) and UNCTAD estimates.

74. Average official development assistance (Johannesburg Plan of Implementation, para. 85) from countries of the Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee as a proportion of gross national income grew slightly, from 0.22 per cent in 2001 to 0.23 per cent in 2002, marking an increase for the first time since 1998. In 2002,

only five countries — Denmark, Luxembourg, the Netherlands, Norway and Sweden — met or exceeded the 0.7 per cent official development assistance target reaffirmed in Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation (see figure 3).[62] The same countries met the 0.2 per cent target for official development assistance to the least developed countries.

75. It has been estimated that an additional $50 billion per year in official development assistance would be needed to implement the internationally agreed development goals, assuming that developing countries have enabling domestic environments and sound macroeconomic policies.[65] Commitments made in the context of the 2002 International Conference on Financing for Development at Monterrey could increase official development assistance flows by $16 billion per year by 2006 (see A/58/216, table 3). Although this would represent an increase of 30 per cent in real terms, it would raise the official development assistance/gross national income ratio only to 0.26 per cent by 2006 and would still leave a large financing gap (see A/58/216, para. 119).

Figure 3
**Net disbursements of official development assistance (as a percentage of gross national income)**




GNI = Gross national income
*Source*: OECD.

76. Some steps have been taken by donors to improve the effectiveness of development assistance through greater harmonization and coherence (Johannesburg Plan of Implementation, para. 85 (b)). In the Rome Declaration on Harmonization in February 2003, heads of bilateral aid agencies and multilateral institutions

committed to streamlining donor procedures and further strengthening recipient country ownership.

77. Debt service for countries under the Heavily Indebted Poor Countries Initiative (Johannesburg Plan of Implementation, para. 89) fell from $3.7 billion in 1998 to $2.4 billion in 2002, reducing the debt-to-export ratio from 16.9 per cent to 9.9 per cent.[66] Implementation of the Initiative is slower than expected, however. Between September 2002 and September 2003 only 2 countries (Benin and Mali) reached their completion points, bringing the total to 8 out of the 27 countries that have reached the decision point, compared with a target of 19 countries. Two of the eight countries that reached the completion point have already returned to a ratio of net present value of debt to exports above 150 per cent, which is regarded as unsustainable.[67] Eleven countries that are in principle eligible for heavily indebted poor countries relief have not yet reached the decision point.[68]

78. Debt relief committed to the 27 countries that have reached the decision point remains 12 per cent below the required total.[69] As of September 2003, bilateral donors had pledged $3.5 billion to the Heavily Indebted Poor Countries Trust Fund, 74 per cent of which has been paid.[70] Several small multilateral creditors and 24 creditor countries have not yet committed to participate in the Initiative. Many commercial creditors also remain reluctant to participate.[69]

79. With regard to non-heavily indebted poor countries debtor countries (Johannesburg Plan of Implementation, para. 89 (d)), in October 2003 the Paris Club of government creditors agreed on a new approach to deal with countries facing debt difficulties, as had been requested by the Group of Eight finance ministers in 2003. The new approach will tailor its response to the specific financial situation of each debtor country, instead of defining standard terms for particular classes of debtor countries.[71]

80. To facilitate the implementation of the Monterrey Consensus, the General Assembly, in its resolution 57/273, established the Finance for Development Office in December 2002. The Office supports the intergovernmental process on the follow-up to the International Conference on Financing for Development and facilitates the full participation of all stakeholders, in particular, the Bretton Woods institutions and WTO, including through the organization of a High-Level Dialogue on Financing for Development. The first High-Level Dialogue was held during the fifty-eighth session of the General Assembly, on 29 and 30 October 2003.

## B. Trade

81. While the failure to reach agreement in Cancun might further reinforce the trend towards bilateral and regional trade agreements, commitment of most WTO members to the multilateral trading system remains firm.[72] The WTO General Council held a meeting on 15 December 2003 which, while it did not lead to any concrete outcome, reconfirmed a sense of engagement and a commitment to the timely completion of the Doha Work Programme.

82. With slower economic growth, world trade experienced a marked slowdown in 2001 and 2002 after having grown at more than 6 per cent per year during the 1990s.[73] It rebounded strongly in the first half of 2003.[74] Although the share of manufactured goods in OECD imports from low and middle-income countries

increased from 41.6 per cent in 1991 to 64.3 per cent in 2001,[75] primary products still make up three fourths or more of the merchandise exports from the Middle East and sub-Saharan Africa. For the majority of countries in sub-Saharan Africa, primary products account for more than 90 per cent of exports.[76]

83. World prices of non-fuel commodities have fallen over the past 20 years by around 50 per cent, posing a major obstacle to sustainable development in many developing countries, although lower prices can benefit commodity importers.[77] Since 2002, there has been an upward price trend, driven in part by strong demand growth in China and other East Asian countries.[78] Commodity prices remain highly volatile, affecting developing countries not only as producers but also as importers, as many least developed countries are net food importers, with imports accounting for 10 to 12 per cent of calorie intake.[79]

84. For agricultural products, improvements in market access, reductions of export subsidies, and reductions in trade-distorting domestic support in agriculture (Johannesburg Plan of Implementation, para. 92 (c)) have seen little progress since the World Summit on Sustainable Development. Total producer support in OECD countries increased from $227 billion in 2001 to $235 billion in 2002 with the European Union, Japan and the United States accounting for $100 billion, $44 billion and $40 billion, respectively.[80] Although OECD countries committed themselves to a reduction in production support, such support continues to constitute two thirds of total domestic support. Export subsidies for agricultural products remained at the same level in 2002 as in 2001, albeit with wide variation across countries. In 2002, prices received by OECD farmers were on average 31 per cent above world market prices, down from 57 per cent in the period 1985-1988.[80]

85. While there has been some tariff reduction following the Uruguay Round, agricultural tariffs in the OECD area still average around 60 per cent, compared with 10 per cent for industrial tariffs. Tariff escalation, with higher tariffs on processed agricultural products, can still be found in 12 out of 17 major commodity chains.[79] Some advances have been made in recent years with respect to market access for least developed countries (Johannesburg Plan of Implementation, para. 93), with a number of OECD countries having granted comprehensive tariff- and quota-free access for least developed countries.[81] These preference margins for least developed countries risk being eroded, however, with further general tariff reductions.[82]

86. The effects of tariff reduction have been partially neutralized by a tendency by both developed and developing countries to resort to more frequent use of contingency measures, such as anti-dumping and countervailing duties. Also, in the past 20 years, new obstacles to trade in agricultural products have emerged with the proliferation of non-tariff barriers, particularly stringent sanitary and phytosanitary standards in developed countries, usually introduced in response to demands of developed country consumers.[83] Developing countries often lack both the technical expertise and the necessary financial resources to meet these new requirements.

87. The textile and clothing sector is of particular importance to developing countries, which account for 50 per cent of world textile exports and 70 per cent of clothing exports. The Uruguay Round Agreement on Textiles and Clothing expires on 1 January 2005, requiring the elimination of all quotas.[84] For developing countries, quota elimination is expected to result in income gains of $24 billion and export revenue gains of $40 billion per year. While developing countries as a whole

are expected to gain, developing countries not currently subject to the Agreement quota restraints could see their market shares erode with increased competition.[85]

88. In December 2002, the WTO General Council adopted guidelines to streamline and facilitate accession of least developed countries to WTO.[86] Nepal and Cambodia will be the first least developed countries to become members through negotiations within WTO.[87] Most donors have increased their trade-related technical assistance to developing countries bilaterally and through contributions to multilateral funds and programmes such as the Doha Development Agenda Global Trust Fund, the Joint Integrated Technical Assistance Programme and the Integrated Framework for Trade-Related Technical Assistance, including for Human and Institutional Capacity-Building, to Support Least Developed Countries in Their Trade and Trade-Related Activities. WTO and OECD have established a joint Doha Development Agenda Trade Capacity-Building Database to monitor developments in the area of trade-related technical assistance.[88]

89. In June 2003, trade ministers of the least developed countries adopted the Dhaka Declaration addressing issues of common concern, including duty-free and quota-free market access, preference erosion, agriculture, and special and differential treatment.[89] The International Ministerial Conference of Landlocked and Transit Developing Countries and Donor Countries and International Financial and Development Institutions on Transit Transport Cooperation, in August 2003, adopted the Almaty Programme of Action addressing five priority areas: transit policy issues; infrastructure development and maintenance; international trade and trade facilitation; international support measures; and implementation and review (see A/58/388).

## C. Technology

90. Environmental policies in developed countries and emerging economies are shifting from pollution control, largely through end-of-pipe technologies, to pollution prevention through more efficient and cleaner production processes. Many Governments have changed their regulatory frameworks to include fiscal incentives for promoting cleaner production, generating an increasing demand for cleaner technologies.[90] Globalization can stimulate the international flow of environmentally sound technologies, but a more conducive policy environment is also necessary to accelerate technology transfer to developing countries (Johannesburg Plan of Implementation, paras. 105 and 106).

91. Most international technology transfer occurs in the context of trade, foreign direct investment, and infrastructure projects, many financed by official development assistance. The improved crop varieties and farming methods generated by international agricultural, fisheries and forestry research centres are another important source of technology for developing countries. The many low-income countries that are marginal participants in world trade and flows of foreign direct investment have very little access to those two key technology channels. Declining public investment in agricultural research has slowed the development and transfer of new crop technologies, particularly those of benefit to poor farmers in developing countries. Inadequate global medical research into tropical diseases, in particular, diseases that affect mostly the poor, is another critical shortcoming. In the case of official development assistance, donors are acutely aware of the need to

incorporate technical capacity-building into their projects, but modern technologies can be costly to service and maintain in poor countries and the use of multiple technologies for a given application — like water pumps — compounds problems of capacity-building.

92. The Doha Ministerial Declaration included for the first time a mandate for WTO members to look at the links between trade and technology transfer and established a working group for that purpose. So far, no recommendations have been agreed on. As for technology transfer to least developed countries, the WTO TRIPS Council decided in February 2003 that its members should submit annual reports on actions undertaken or planned to facilitate such transfer pursuant to article 66.2 of the TRIPS Agreement.

93. The availability of information and communication technologies (Johannesburg Plan of Implementation, para. 112) in developing countries is still limited, but, with rapidly falling costs, it has improved markedly over the last decade, with the percentage of people having access to telephone services increasing from 2.4 per cent in 1990 to 20.8 per cent in 2002, and those with computer and Internet access from 0.3 per cent to 3.2 per cent. However, a wide gap remains with developed countries. Moreover, availability of these technologies is widely uneven among developing countries, with sub-Saharan Africa and South Asia lagging behind (see A/58/323, table 18). Narrowing this digital divide will be a key task for the World Summit on the Information Society, with the first phase held at Geneva in December 2003 and the second to be held at Tunis in November 2005. The first phase resulted in a Declaration of Principles and an Action Plan[91] setting forth a vision and covering the essential issues associated with the information society. In particular, it emphasized that information and communication technologies applications should benefit all aspects of life, further environmental protection and natural resources management, contribute to sustainable production and consumption patterns and reduce traditional barriers to equitable access to local and global markets.

## D. Corporate social responsibility

94. Industry and other stakeholders have continued to develop programmes on corporate social responsibility (Johannesburg Plan of Implementation, para. 49) in response to the globalization of production and concern in developed countries over working conditions in developing countries. Pressure has been brought to bear particularly on large transnational companies with well-known brand names and extensive supply chains in developing countries, calling on these companies to ensure that their supply chains conform to international core labour standards and to contribute to host countries' sustainable development efforts. Companies have responded by developing codes of conduct and monitoring systems for themselves and their suppliers. Since the first corporate code of conduct was developed in 1991, about 1,000 have been adopted. A number of third-party assessment and certification systems have also been established, in some cases in cooperation with non-governmental, workers' and other organizations. Some developing country Governments are encouraging corporate social responsibility in their enterprises, to promote both national sustainable development and exports. The number of companies and facilities covered by these systems, while still very small in global terms, is growing and the systems are being strengthened.[92]

# VI. Institutional and strategic framework for sustainable development

## A. International and regional initiatives for capacity-building and partnerships

95. Efforts have been undertaken through the United Nations system and other international and regional organizations to enhance partnerships for sustainable development among governmental and non-governmental actors and to promote participation of major groups (Johannesburg Plan of Implementation, chap. IX). Regional implementation forums have been held in preparation for the twelfth session of the Commission on Sustainable Development and regional reports have been prepared in cooperation with the regional commissions and other regional and subregional organizations.

96. At the regional level, the United Nations regional commissions, the regional development banks and other regional organizations have been incorporating the concept of sustainable development into their programmes, integrating economic, social and environmental aspects and building partnerships with civil society and the private sector. Recognizing that this integrated approach to development can yield certain insights beyond conventional macroeconomic and sectoral approaches but also be more complex — particularly in the context of globalization — regional organizations are addressing both their own institutional capacity-building requirements and those of their members.

## B. National strategies for sustainable development

97. Many countries, in some cases with international support, have taken steps towards the formulation of national strategies for sustainable development, integrating economic, social and environmental aspects, as called for in Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation (para. 162 (b)). In some countries, these strategies are formulated as poverty reduction strategies that integrate economic, social and environmental issues.

98. Fifty countries have reported that they have national sustainable development strategies or are developing such strategies, while 65 other countries have elements of a sustainable development strategy. Updated information on national strategies is to be submitted in national reports to the Commission at its twelfth session. The United Nations system, in particular the Department of Economic and Social Affairs and UNDP, have organized capacity-building workshops and technical assistance projects to support the formulation of national sustainable development strategies. Much support has also been provided by international non-governmental organizations.

99. National plans and macroeconomic and sectoral strategies generally address elements of sustainability but generally in a disjointed manner. In some developing countries, for example, poverty reduction strategies have been introduced as overarching strategic plans, but these are often not linked to other strategies such as the national biodiversity strategy and action plans or the national action plans to combat desertification. Nor do they generally give adequate consideration to

environmental issues — even when the state of the environment is an important factor in poverty reduction. Also, sectoral policies for agricultural, industrial or education development have in many cases not taken into account poverty reduction strategies or sound natural resource management.

## VII. Current status and future challenges

100. Considering the rather short time since the World Summit on Sustainable Development, the state of progress in implementation is moderately encouraging in certain areas. In many cases, however, new international and regional initiatives have yet to be translated into detectable improvements in indicators of human well-being and sustainable development. Thus, for the moment, implementation of the Johannesburg Plan of Implementation must be measured mostly in terms of process, although at national and local levels experience is richer and lessons are beginning to emerge. Moreover, the international political and economic environment has not been especially conducive to progress recently. Now, with world economic recovery gathering momentum, the picture may be changing, although significant challenges remain in strengthening multilateral institutions that set the framework conditions for sustainable development and in sustaining progress towards addressing global environmental problems.

101. Progress is most evident in areas where important interests are not immediately threatened or, alternatively, where a powerful constituency favours policy shifts towards more sustainable development. Also, although there have been notable successes in managing the global commons, this remains one of the most challenging areas for international environmental diplomacy, especially where national benefits are perceived to be considerably longer term and more uncertain than are national costs. Further, broad agreement on principles and frameworks is more easily achieved than are concrete and potentially painful policy and institutional reforms.

102. More specifically, measures to establish marine protected areas and reduce certain risks to the marine environment from shipping are making faster progress than is reform of fishery subsidies. Sound chemicals management commands widespread support — although some specific measures relating to costly chemicals testing may not. Building trade capacity in developing countries attracts resources from multiple donors, while reform of rich countries' agricultural policies continues to face strong resistance. When the problem of ozone depletion could be addressed by a few large chemical companies with proven substitutes for ozone-depleting substances, it was readily manageable; but once control measures were extended to affect farmers without good substitutes for ozone-depleting substances, it has become less so. Tackling climate change is perceived to have wide-ranging economic impacts, including on some major industries. A critical mass of influential companies whose long-term strategies are tightly linked to development and use of low-carbon energy sources has yet to emerge. Progress has been glacial in slowing deforestation and biodiversity loss, where global environmental benefits are largely supplied by developing countries that must agree to forego certain options for exploiting their natural resources.

103. In some cases, moral suasion has been a powerful force for change, with ethical imperatives overriding commercial interests — anti-retroviral drugs being a

case in point, and debt relief for poor countries another. The present visibility enjoyed by corporate social responsibility has contributed to making large companies sensitive to reputational influences on the bottom line.

104. At the regional level, the picture is mixed. Sub-Saharan Africa faces the biggest challenges, as HIV/AIDS combines with widespread poverty and malnutrition and inadequate infrastructure to weaken the foundation for sustainable development in many countries. Hopeful signs include the establishment of the New Partnership for Africa's Development and the determination of several regional organizations and Governments to promote pro-poor growth, including by building trade capacity, by attracting more foreign direct investment into labour-intensive sectors, and by improving political governance. After many years of decline, official development assistance levels have recently increased somewhat in real terms, and funding for HIV/AIDS prevention and treatment has grown rapidly. The resource gap remains enormous, however, as sustainable development requires investments on multiple fronts — rural roads and other transport infrastructure, electricity, water and sanitation — in addition to recurrent spending on education and health care. Continuing high fertility and rapidly growing numbers of school-aged children as well as the high and growing number of people living with HIV/AIDS are weighing heavily on the education and health sectors. Drought, desertification and land degradation are heavy burdens on many African countries, and lack of new methods to improve agricultural productivity on marginal lands is a major limitation on progress.

105. In Asia, the region with the largest number of poor people, the picture is more promising. Poverty reduction has been dramatic in East Asia and it appears to be gathering pace in South Asia, which has enjoyed high economic growth in recent years. If recent trends continue, the Millennium Development Goals of halving poverty in Asia will be achieved, perhaps well before 2015. While rising prosperity will facilitate investments in education, health and basic environmental amenities, Asia's economic success brings with it sizeable environmental challenges at multiple scales — from hazardous waste and toxic chemicals, to deforestation and biodiversity loss, to rapidly rising greenhouse gas emissions. Greater openness of economies, however, is making up-to-date, cleaner technologies more readily accessible, through both imports and foreign direct investment. At the same time, intensifying competitive pressures favour greater resource efficiency, but may also encourage regulatory avoidance where enforcement is weak.

106. Latin America and the Caribbean have fared far worse than Asia economically over the past decade. Wide income disparities have made it difficult to maintain broad support for economic reforms that create painful short-term dislocations and have so far generated little growth. While the region has a substantial industrial sector, its manufactured exports represent a far smaller share of total exports than is the case for East Asia and the Pacific or even for South Asia. As with Africa and the Middle East, commodity dependence leaves some countries vulnerable to price volatility and adverse trends. Vulnerability to natural disasters continues to be a major concern, especially of Caribbean and Central American countries. Several countries in Latin America and the Caribbean have come to depend heavily on overseas remittances, which have lately proved to be a relatively stable source of external financing compared with private capital flows. With little progress in poverty reduction and limited access to land for the rural poor, pressures on natural resources remain strong. On the other hand, one very positive development is the

steep rise in secondary school enrolments in the past half-decade. Also, in some countries, innovative approaches to environmental policy are beginning to bear fruit.

107. The West Asian region has also seen limited growth over the past decade. Continued heavy reliance on fossil fuel exports could pose a major challenge if and when concerted international action is taken to reduce greenhouse gas emissions. The flow of workers' remittances, both within the region and to South and South-East Asia, is heavily influenced by economic conditions in leading oil-exporting countries. Significant progress has been made over the past decade in raising female school enrolment rates, notably at the secondary level, though further improvement is needed. High projected regional population growth will require continued investment to sustain progress on the education front in coming decades. The perception of regional instability constitutes a major deterrent to private investment outside sectors where high expected returns can justify the risks.

108. Most countries with economies in transition are emerging from a decade of decline, when living standards and social indicators deteriorated. A number are resource-abundant and are benefiting from high oil, gas and other commodity prices. With the decline of their heavy industries, they have substantially reduced greenhouse gas emissions, but in the absence of the Kyoto Protocol they may not reap significant financial benefits from selling unused emission allowances. As several of these countries integrate into the European Union, their living standards are expected to converge fairly rapidly towards European Union levels, as are their environmental standards.

109. The developed countries are showing some global leadership towards sustainable development, but far below their potential. Official development assistance has improved slightly recently, but remains far below international targets and the requirements for achieving the Millennium Development Goals and implementing the Johannesburg Plan of Implementation and other international agreements. Markets remain quite protectionist with respect to exports of particular interest to developing countries. While efforts are being made to make consumption and production patterns more sustainable, there is considerable scope for further progress — notably in reducing per capita waste generation and greenhouse gas emissions, and in improving fisheries management. The developed countries remain the source of much technological innovation. Still, bolstering research and development into the health and nutritional problems of particular concern to poor people in the developing world remains a major challenge, as is ensuring that the products of such research are affordable. Efforts by the developed countries to develop and transfer cleaner energy technologies will be crucial to addressing climate change.

*Notes*

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[3] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

[4] Economic and Social Council resolution 2003/61.

[5] General Assembly resolution 55/2.

[6] *Global Economic Prospects 2004* (World Bank), 2003.

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[16] *Maternal Mortality in 2000* (WHO/UNICEF), 2003.

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[18] UN/POP/MORT/2003/12 (Population Division of the Department of Economic and Social Affairs), p. 2.

[19] Millennium Project, background paper of the Task Force on Major Diseases and Access to Medicine, Subgroup on HIV/AIDS, p. 10.

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[28] EFA Global Monitoring Report, 2003/4 (UNESCO), table 2.9.

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[37] S. M. Garcia and D. J. Doulman, "Towards responsible ocean and coastal capture fisheries: The FAO programme in a WSSD perspective" (FAO Fisheries Department), November 2003.

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[50] See www.pic.int.

[51] See www.pops.int.

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[58] World Tourism Organization: http://www.world-tourism.org/market_research/facts/market_trends.htm.

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[67] *Human Development Report 2003* (UNDP), p. 153.

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[73] *World Economic and Social Survey 2003* (United Nations publication, Sales No. E.03.II.C.1); and *Trade and Development Report 2003* (United Nations publication, Sales No. E.03.II.D.7), p. 41.

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[75] *World Development Indicators 2003* (World Bank), p. 318.

[76] *World Trade Report 2003* (WTO); www.wto.int/english/res_e/statis_e/its2003_e/section4_e/iv22.xls; and OECD policy brief, August 2003.

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